DC to 8.0GHz	Stripline Attenuators (Internally Mounted)	CL 354

GENERAL FEATURES

The AT-900 series consists of compact, lightweight internally mounted fixed attenuators which can be soldered directly to strip lines, with attenuation from 0 to 10 dB in steps of 1 dB.

OPERATIONAL ENVIRONMENT

Operating temperature; −10°C~+65°C
Humidity; 0~95%

TEST ENVIRONMENT

Vibration resistance; 10~55Hz
Total amplitude; 1.5mm 55~2000Hz 98m/s^2
Temperature resistance; −55°C~+85°C
Impulse resistance; 490m/s^2
Testing Method per MIL-STD-202

MATERIAL・FINISH

Part Name	Material	Finish
Body	Brass	Nickel-plated
Resistor	Metal film	
Tab	Copper	Nickel-plated

Model No.

AT − 9 0 0 − ___

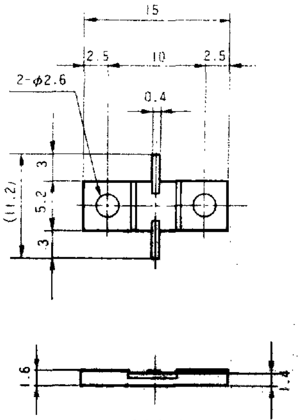
Shows the shape:
- Blank: Plate with tab
- C: With case but without tab
- PT: Plate without tab
- T: With plate but without tab

Attenuation (dB)
Ex. 01 .... 1 dB
06 .... 6 dB
00−(0) .... 0 dB

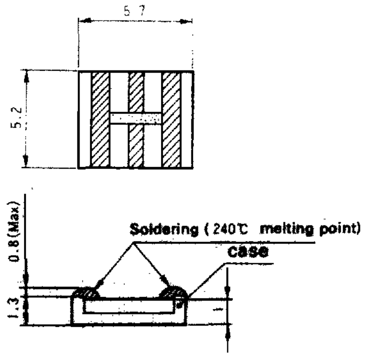
Product classification (in this case the 900 Series)

Attenuator symbol

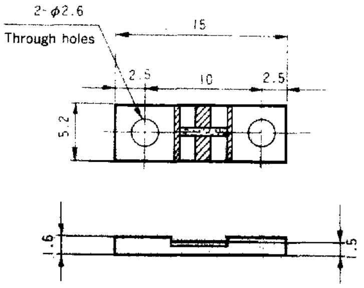
DIMENSIONS



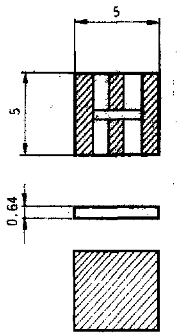
AT-900 Type



AT-900-C Type



AT-900-T Type



AT-900-PT Type

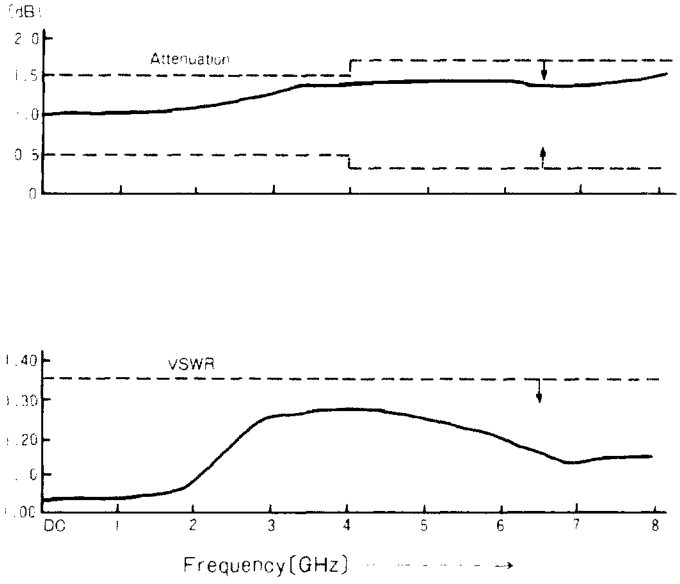
SPECIFICATIONS

Model No.	Attenuation (dB)		VSWR (Max) DC～ 8GHz	Power (W)	Surface Temperature at Maximum Load (°C Max)	Weight (g)
	DC～4GHz	4～8GHz				
AT-900-(0)	$0^{+0.5}_{0}$	$0^{+0.7}_{0}$	1.35	1	+85	1
AT-901	1±0.5	1±0.7	1.35	1	+85	1
AT-902	2±0.5	2±0.7	1.35	1	+85	1
AT-903	3±0.5	3±0.7	1.35	1	+85	1
AT-904	4±0.5	4±0.7	1.35	1	+85	1
AT-905	5±0.5	5±0.7	1.35	1	+85	1
AT-906	6±0.5	6±0.7	1.35	1	+85	1
AT-907	7±0.5	7±0.7	1.35	1	+85	1
AT-908	8±0.5	8±0.7	1.35	1	+85	1
AT-909	9±0.5	9±0.7	1.35	1	+85	1
AT-910	10±0.5	10±0.7	1.35	1	+85	1

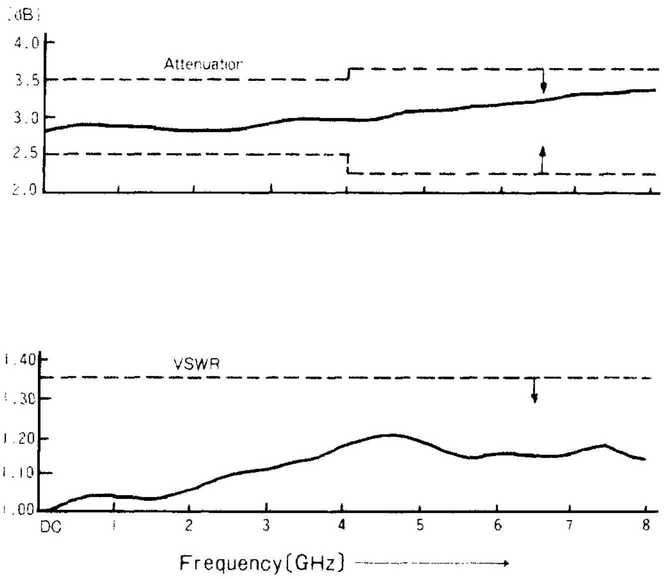
Model No.	Frequency Range (GHz)	Attenuation (dB)	VSWR (Max)	Power (W)	Surface Temperature at Maximum Load (°C Max)	Weight (g)
AT-900-(0)-C	DC~4	$0^{+0.5}_{0}$	1.3	1	+85	0.5
AT-900-(0.5)-C	DC~4	0.5±0.5	1.3	1	+85	0.5
AT-901-C	DC~4	1±0.5	1.3	1	+85	0.5
AT-900-(1.5)-C	DC~4	1.5±0.5	1.3	1	+85	0.5
AT-902-C	DC~4	2±0.5	1.3	1	+85	0.5
AT-903-C	DC~4	3±0.5	1.3	1	+85	0.5
AT-904-C	DC~4	4±0.5	1.3	1	+85	0.5
AT-900-(0)-T	DC~4	$0^{+0.5}_{0}$	1.3	1	+85	1
AT-901-T	DC~4	1±0.5	1.3	1	+85	1
AT-902-T	DC~4	2±0.5	1.3	1	+85	1
AT-903-T	DC~4	3±0.5	1.3	1	+85	1
AT-904-T	DC~4	4±0.5	1.3	1	+85	1
AT-905-T	DC~4	5±0.5	1.3	1	+85	1
AT-906-T	DC~4	6±0.5	1.3	1	+85	1
AT-907-T	DC~4	7±0.5	1.3	1	+85	1
AT-908-T	DC~4	8±0.5	1.3	1	+85	1
AT-909-T	DC~4	9±0.5	1.3	1	+85	1
AT-910-T	DC~4	10±0.5	1.3	1	+85	1
AT-900-(0)-PT	DC~4	$0^{+0.5}_{0}$	1.3	1	+85	0.1
AT-901-PT	DC~4	1±0.5	1.3	1	+85	0.1
AT-902-PT	DC~4	2±0.5	1.3	1	+85	0.1
AT-903-PT	DC~4	3±0.5	1.3	1	+85	0.1
AT-904-PT	DC~4	4±0.5	1.3	1	+85	0.1
AT-906-PT	DC~4	6±0.5	1.3	1	+85	0.1
AT-907-PT	DC~4	7±0.5	1.3	1	+85	0.1

(Typical) DATA

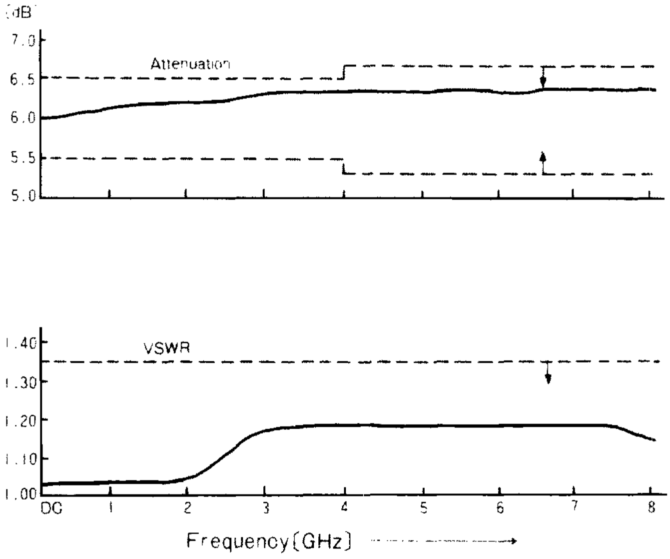
AT-901



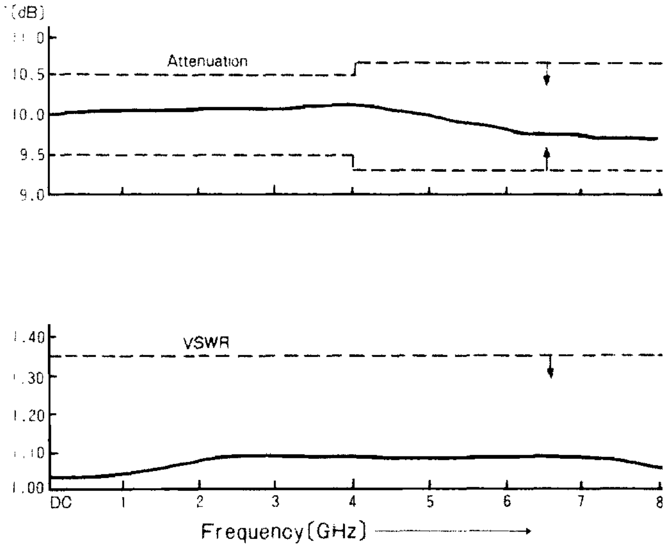
AT-903



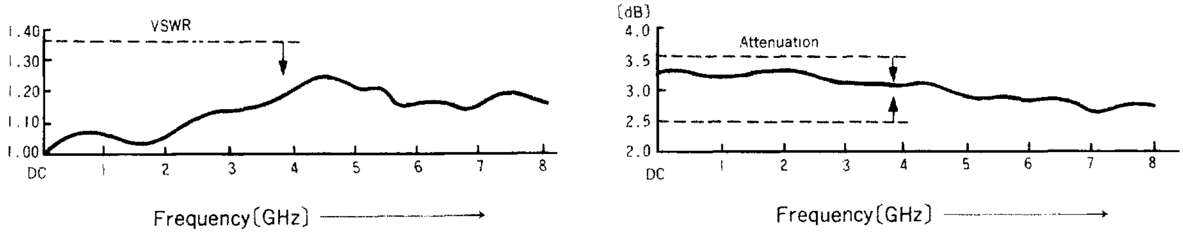
AT-906



AT-910

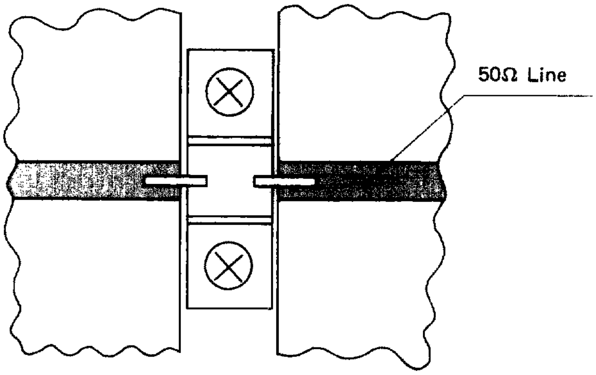


AT-903-T

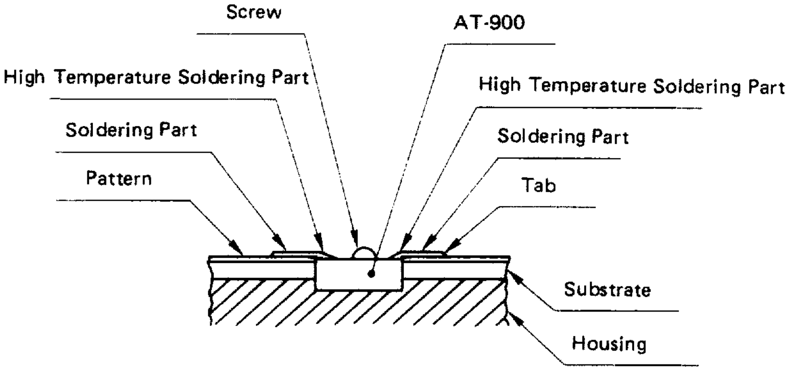


INSTALLATION

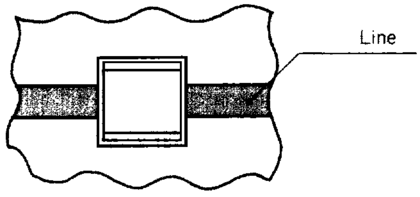
AT-900

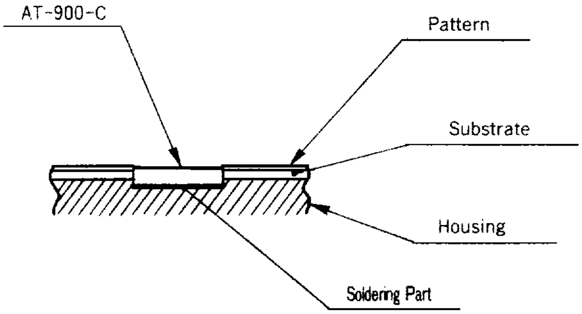


- Because the tab of AT-900 series is fixed by high-temperature soldering (280°C melting point), when soldering on the micro strip board, do at a lower temperature.
- Although high frequency characteristic is deteriorated to some extent, slacken the tab to raise its heat reliability upon installing.



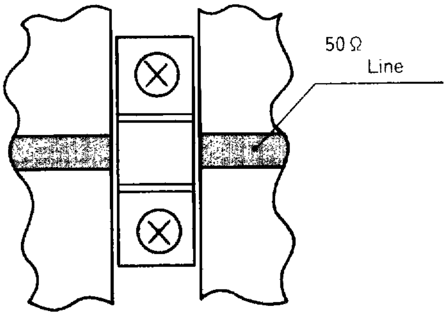
AT-900-C

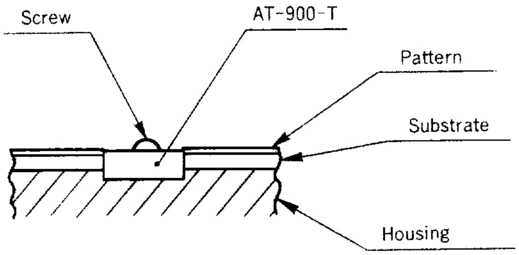




- Take care to keep the temperature below 240°C when soldering the tabs to the housing (ground) because the grounding electrode is soldered to the case with solder having a melting point of 240°C.
- The 50-ohm line is soldered to the AT-900-C center electrode using tabs or bonded using gold wire.
- Solder the tabs quickly to prevent the diffusion of the center electrode (gold electrode).

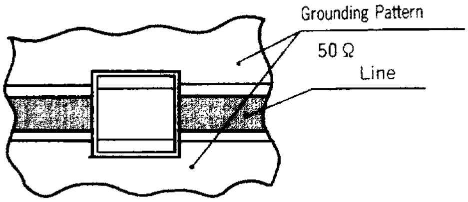
AT-900-T

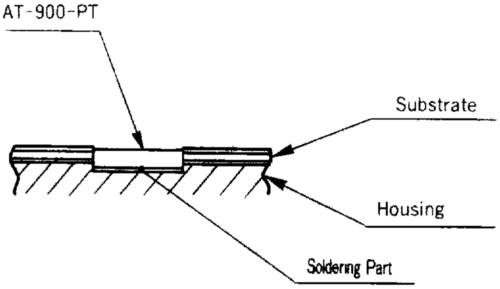




- The 50-ohm line is soldered to the AT-900-T center electrode using tabs or bonded using gold wire.
- Solder the tabs quickly to prevent the diffusion of the center (gold) electrode.

AT-900-PT





- In a separate AT-900-PT, the ground on the resistor surface is not connected to the ground on the back.
  To maintain excellent high-frequency performance, connect the ground on the resistor surface to the housing (ground) by modifying the processing and mounting of the substrate.
- To prevent diffusion of the center (gold) electrode, solder the tabs quickly when the connection is made by soldering the tabs.